

SPIROGYRA HOLLANDIA, A NEW SPECIES FROM NEW GUINEA

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The type material was collected at Hollandia, Dutch New Guinea, by Mr. Robert Sigafoos, now at the Harvard Biological Laboratories. Collections from Biak, Dutch New Guinea, made by Dr. M. E. Britton, Northwestern University, established the limits of variability of the species as it is now described.

The writer expresses his appreciation to Mr. Sigafoos and Dr. Britton for the material, and to Dr. E. N. Transeau, Professor Emeritus of this department, for his criticisms and for the use of his unpublished monograph on the Zygnemataceae which made possible the segregation of the species.

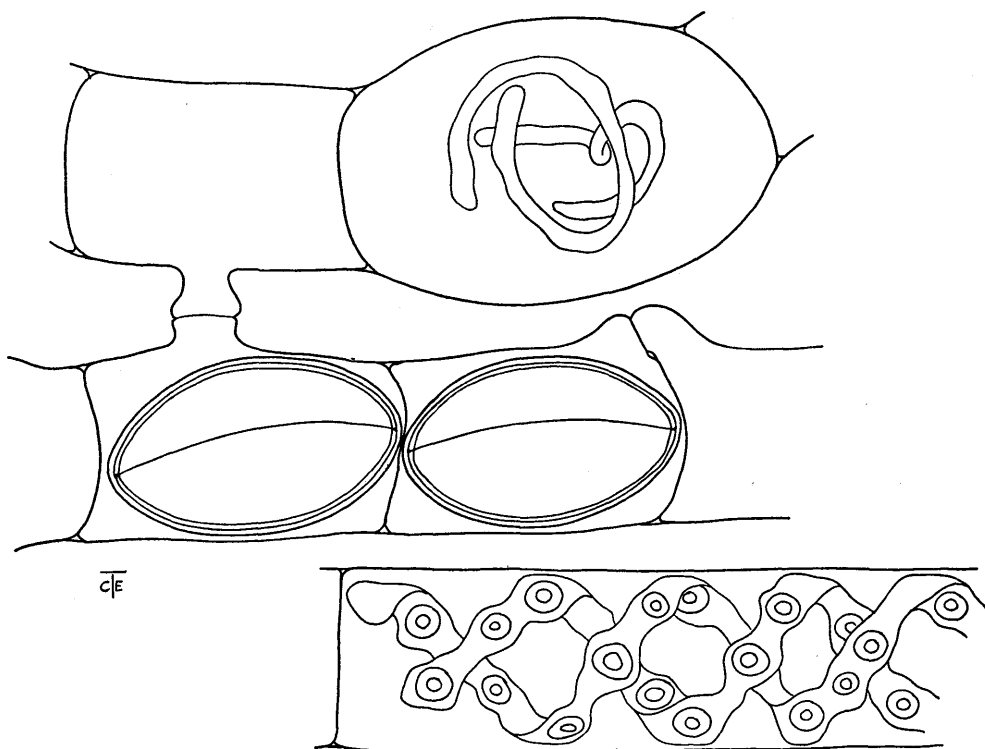


FIG. 1. *Spirogyra hollandia* sp. nov. Conjugating filaments showing lateral and scalariform conjugation, mature zygospores and a sterile cell. A portion of a vegetative cell is also shown.

Spirogyra hollandia sp. nov.

Vegetative cells $36-41\mu \times 60-192\mu$ with plane end walls; 2 chromatophores, broad with large pyrenoids, making 1.5-2.5 turns in the cell; conjugation usually lateral, rarely scalariform; tubes formed by both gametangia; sterile cells sometimes inflated; receptive gametangia cylindrical or enlarged; zygospore ellipsoid with rounded ends, $38-42\mu \times 62-78\mu$, median wall smooth, bright yellow at maturity.

Dutch New Guinea: Hollandia (Robert Sigafoos Coll.): Biak (M. E. Britton Coll.).

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